

A close-up, high-angle shot of a person with dark hair tied back, wearing safety glasses and a green and blue plaid shirt. They are focused on working on a circuit board with various electronic components. A bright lamp is positioned above the work area, casting a warm glow. The background is dark and out of focus. Large white curved shapes are overlaid on the left side of the image.

cipem

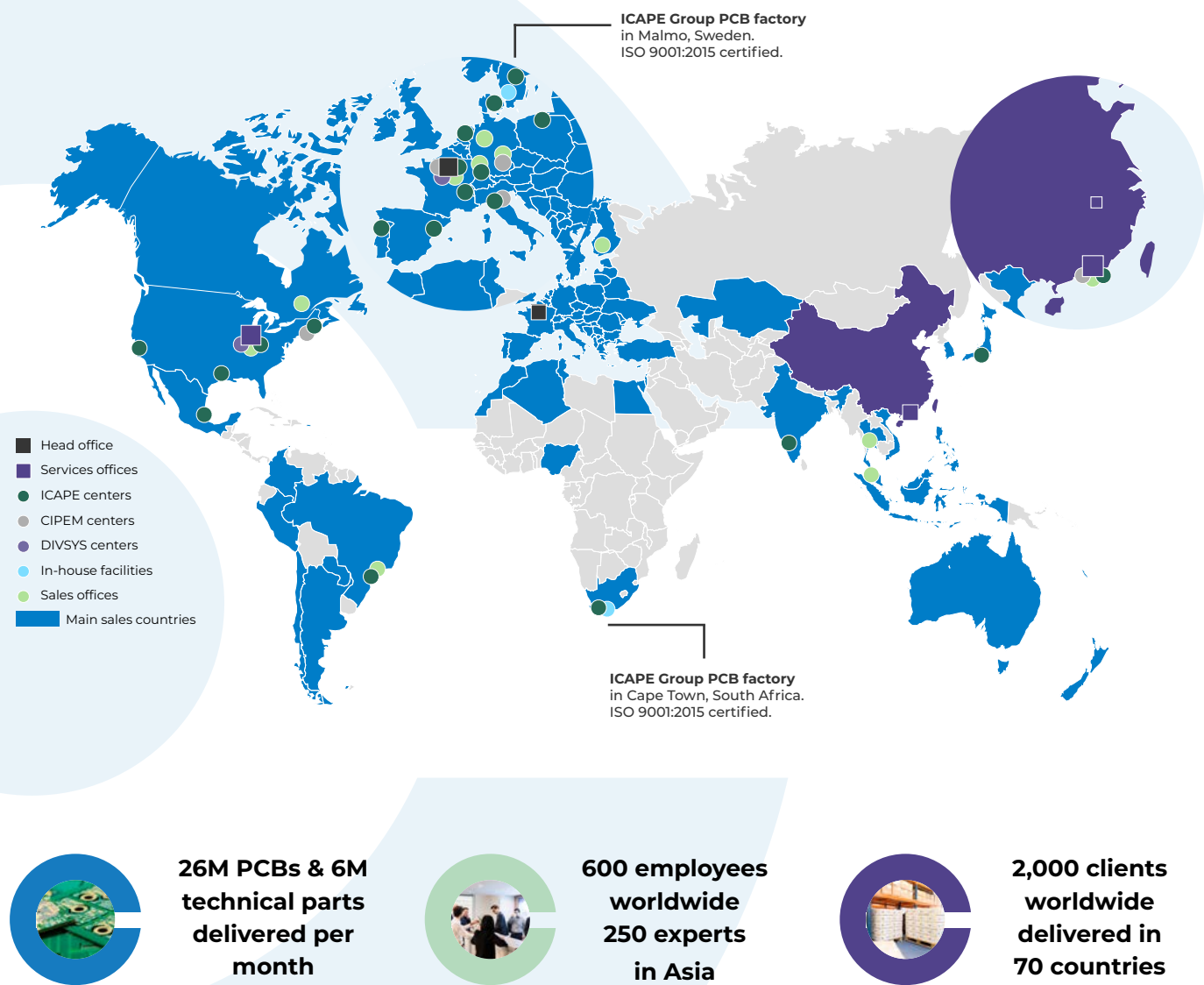
Custom-Made **Technical Parts**

ICAPE GROUP
The power of precision

Worldwide organization

Global presence & local support

The power of precision



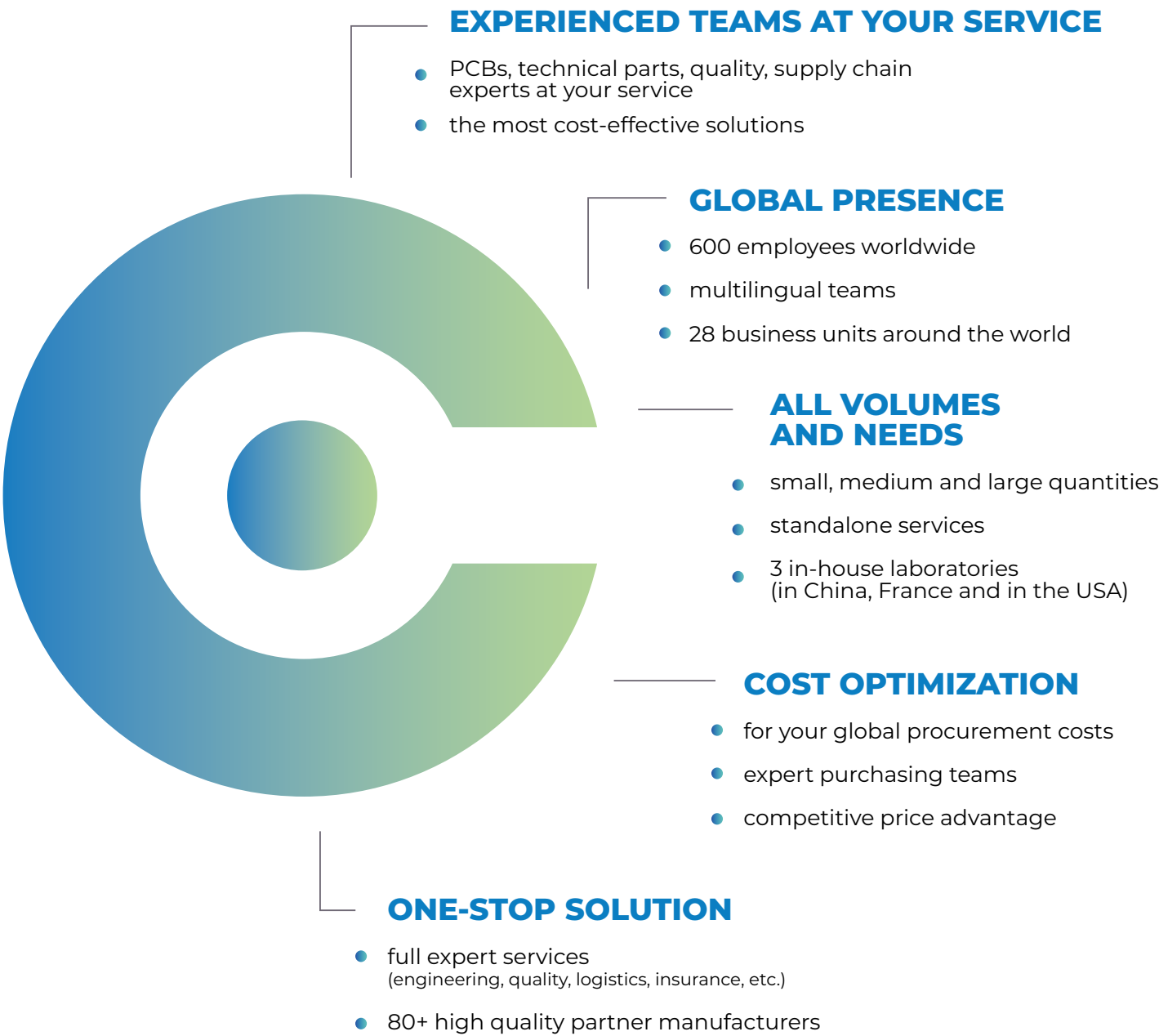
CONSTANT GROWTH

A strong market presence with over **28 sales centers** and a **large customer base all over the world** secure and accelerate ICAPE Group's business growth! We benefit from strong demand and organic growth as well as growth through mergers and acquisitions. Our local presence in the production chain of our partner factories in Southeast Asia and North America generates a real difference for our customers by securing delivery times and continuous improvements in engineering, quality, technology and sustainability.

Why ICAPE Group?

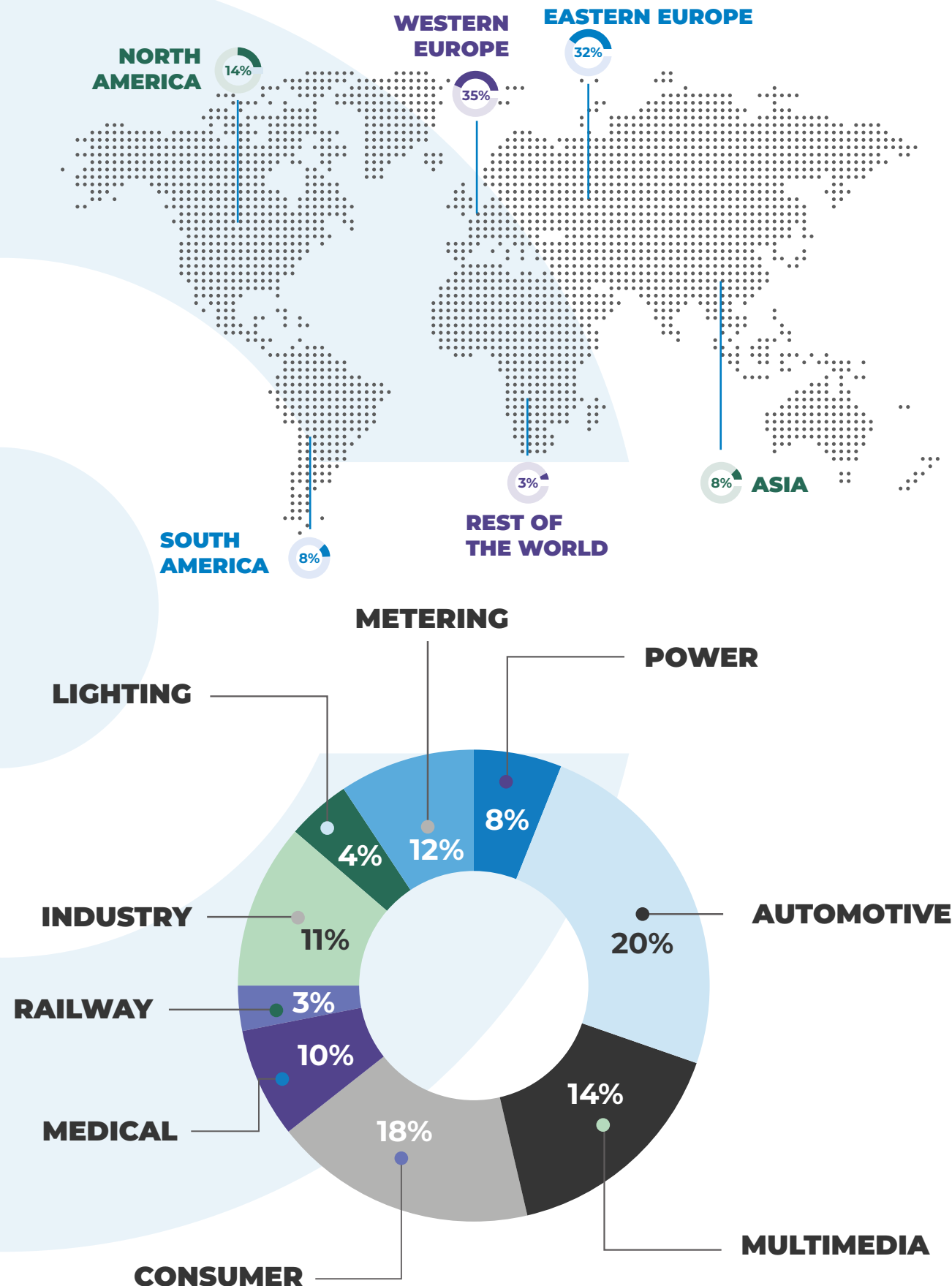
Our goal is to make your job & projects easier!

At ICAPE Group, our approach is to combine our understanding of the electronics market with a **commitment to meeting the business goals of our clients**. Our staff is diverse and talented in all aspects of design, price management, manufacturing, testing, shipping of PCB, and Technical Part projects. We love what we do and it shows in the expert services we provide.



Global presence

Presence on all continents
serving all industries



Technical parts

10 commodities
50 partner factories

-
- CABLES & CONNECTORS**
- Customized Cable Assemblies & Common Cables Assemblies
 - Wire Harnesses & Customized Connectors
- ADAPTERS**
- Wall Mount Adapters & Interchangeable Adapters
 - Desktop Adapters & Open Frame Power & LED Drivers
- TRANSFORMERS & COILS**
- High & Low-Frequency Transformers
 - Air Coils & Filters & Toroids, Coils & Inductors
- KEYPADS**
- Membrane Switch Keypads
 - Overlays & Silicone Keypads
- BATTERIES**
- Li-ion & Li-Po & Ni-Mh & Lead Acid
 - Primary Batteries
- DISPLAYS**
- TFT & VA Type
 - TN & HTN & STN & FSTN & DFSTN Types
- PLASTIC & SILICONE**
- Plastic Injection Parts & Plastic Injection Molding
 - Silicone Mechanical Parts
- METAL**
- Stamping Parts
 - Shields & Heatsinks
- SUB-ASSEMBLIES**
- Electromechanical Assemblies
 - PCB Assemblies
- REMOTE CONTROL UNITS**
- IR InfraRed
 - BT BlueTooth & RF Radio Frequency

Cables and Connectors

Completely custom

CUSTOMIZED CABLE ACCESSORIES

- WIRE HARNESS
- WATERPROOF CABLES
- SENSOR CABLES
- FLAT CABLES
- OBD CABLES
- EV CHARGING CABLES

CUSTOMIZED CONNECTORS

COMMON CABLE ASSEMBLIES

- VGA
- HDMI
- RCA
- ETHERNET
- DVI
- USB

Our capabilities

Materials & engineering wire cables and connectors

MATERIAL CAPABILITIES

METAL MATERIALS

COPPER

- Economical
- Standard in the electrical conductor

ALUMINUM

- Light weight
- Great strength-to-weight ratio

SILVER

- Good conductivity
- Protection against corrosion

GOLD

- Excellent corrosion resistance
- Easily soldered

TIN

- Very resistant
- Very solderable

PLASTIC MATERIALS

PVC POLYVINYL CHLORIDE

- Durable
- Not suitable for mv/hv cables

PE POLYETHYLENE

- Lowest dielectric losses
- High initial dielectric strength

XLPE CROSS-LINKED POLYETHYLENE

- Low dielectric losses

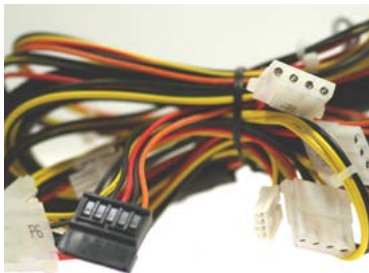
EPR ETHYLENE PROPYLENE RUBBER

- Increased flexibility

TPE/TPU THERMOPLASTIC ELASTOMERS

- Better elasticity
- Low temperature resistance

CUSTOM CAPABILITIES



- ✓ **COLORS**
ALL COLORS AVAILABLE
- ✓ **COVER MATERIALS**
ALL TYPES: METAL, SHIELDING, PVC, ABS
- ✓ **TERMINAL TREATMENTS**
GOLD, SILVER, TIN PLATED, ETC
- ✓ **SPECIFICITIES**
WATERPROOF, IP PROPERTIES
- ✓ **OVERMOLDING**
- ✓ **OTHER CUSTOMIZATIONS**
ENGINEERS AT YOUR DISPOSAL

Adapters

Power supply



Does your product require an external power supply? **CIPEM** is here for you!

CIPEM provides switching mode adapters, open-frame power supplies, and LED drivers.

CIPEM can offer common types of adapters but mainly custom ones. With an offer ranging from AC to DC power supply from low power (2.5W) to high power (300W). Our open-frame power supply devices are custom-made with standard components to be perfectly compatible with a specifically intended electrical device.

Our capabilities & certifications

The following table is a brief summary of the technical capabilities of the adapters offered by CIPEM:

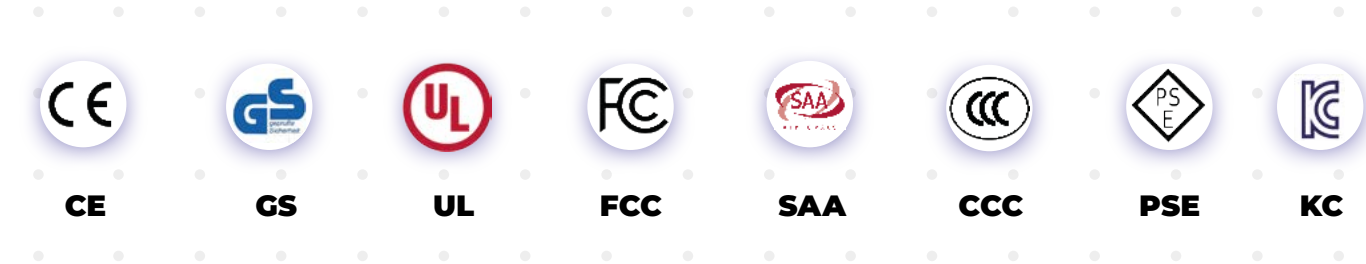
TECHNICAL CAPABILITIES

MAIN CAPABILITIES ADAPTERS	INPUT POWER RANGE	OUTPUT POWER RANGE	AC PLUG DIFFERENT COUNTRIES
Wall Mount Adapters	90 - 264 V AC 50/60HZ	3W - 50 W	✓
Desktop Adapters	90 - 264 V AC 50/60HZ	24W - 180W	✓
Interchangeable Adapters	90 - 264 V AC 50/60HZ	10W - 50 W	✓

MAIN CAPABILITIES ADAPTERS	CABLES LENGTH	PLUG SIZE	EFFICIENCY	COLOR
Wall Mount Adapters	DC: 0.5M-1.8M	DC: 5.5 X 2.5 X 10 MM or customized size	Level V & VI	Black or White
Desktop Adapters	AC & DC: 0.5M - 1.8M	DC: 5.5 X 2.5 X 10 MM or customized size	Level V & VI	Black or White
Interchangeable Adapters	DC: 0.5M-1.8M	DC: 5.5 X 2.5 X 10 MM or customized size	Level V & VI	Black or White

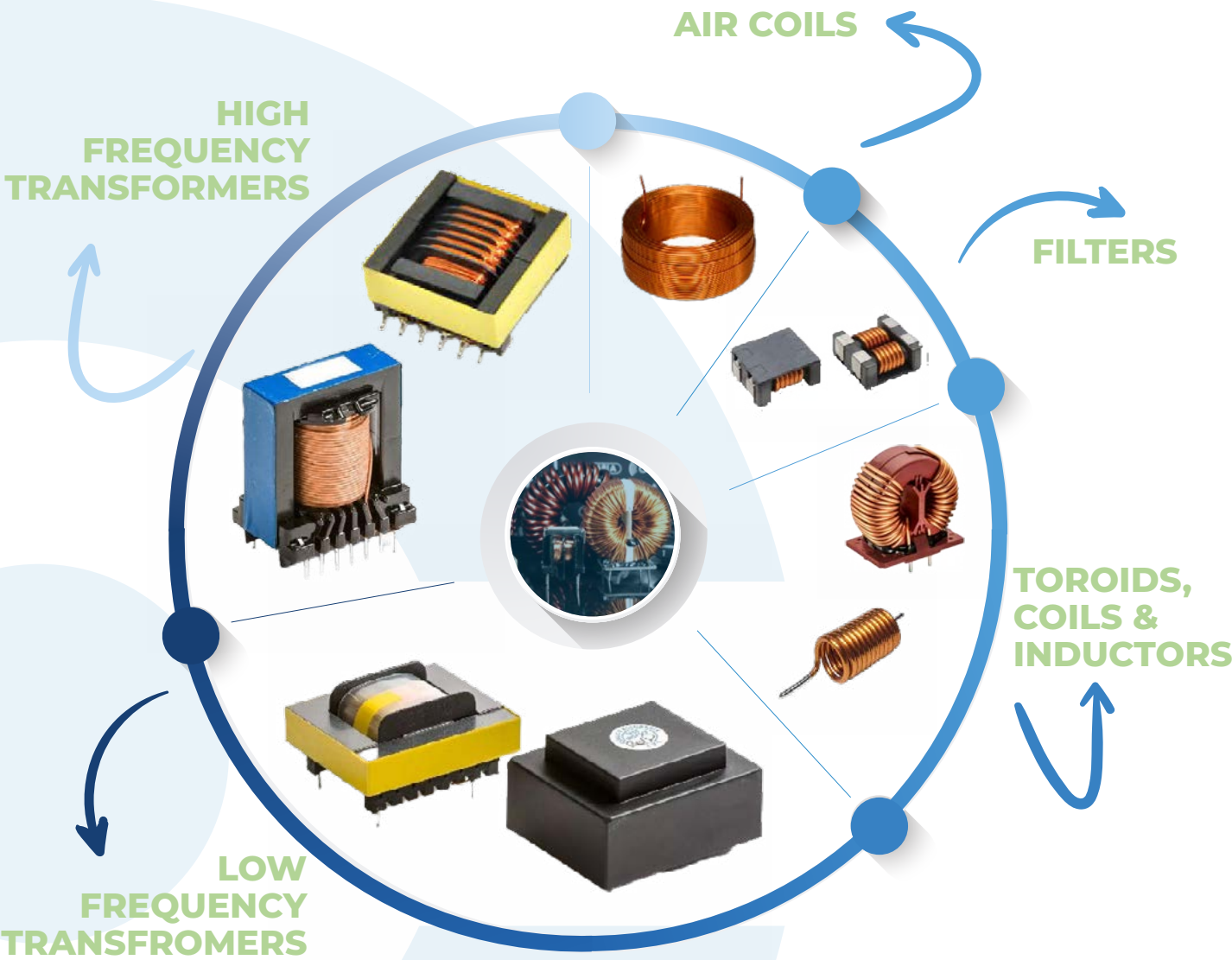
OUR CERTIFICATIONS

The following table is a brief summary of the certifications we have for our adapters:



Transformers & Coils

Completely custom



A WIDE RANGE TO CATER TO ALL NEEDS

Transformers can be of high and low frequency and usually consist of **toroidal cores, coils, inductors, current transformers, line transformers**, etc.

Transformers are used in all fields: industrial, communication, consumer, automotive, household, renewable energy, and for different products such as electronic controllers, solar inverters, cable modems, air conditioners, electrical tooling, etc.

Most transformers are designed to be embedded in or mounted on PCBs.

Our custom offer

Standard to complex custom



COILS

- COMMON MODE CHOKES
- POWER INDUCTORS
- FILTERS
- TOROIDAL CORES, DRUM CORES
- RING CORES
- ROD CORES, ETC

TRANSFORMERS

- TOROIDAL TYPES
- SMTA TYPES

CUSTOM CAPABILITIES



- ✓ **DIMENSIONS**
DETAILED DIMENSIONS ESPECIALLY THE PIN PITCH AND PIN ROW
- ✓ **SCHEMATIC**
WINDING SCHEMATIC DIAGRAM
- ✓ **LAYER**
WINDING LAYER DIAGRAM
- ✓ **STRUCTURE**
WINDING STRUCTURE DIAGRAM (Wire type and diameter, number of turns)
- ✓ **ELECTRICAL**
PRIMARY INDUCTANCE DCR OF EACH WINDING
HI-POT TESTING
TEST CONDITION

Keypads

Membrane switch & overlays & silicone

MEMBRANE SWITCH KEYPADS

CIPEM offers a wide range of high-performance custom Membrane Switch Keypads. Membrane Switch Keypads are made of different plastic films and double-sided adhesive materials with graphic printing and printed electronic circuit.



OVERLAYS

CIPEM custom designs and fabricates overlays ideal for recessed moldings, switch assemblies, and front panel graphics. We meet any overlay design requirement such as backlighting, panel cut-outs, and harsh/hazardous environmental conditions. Different surface, color and printing options are available.



SILICONE KEYPADS

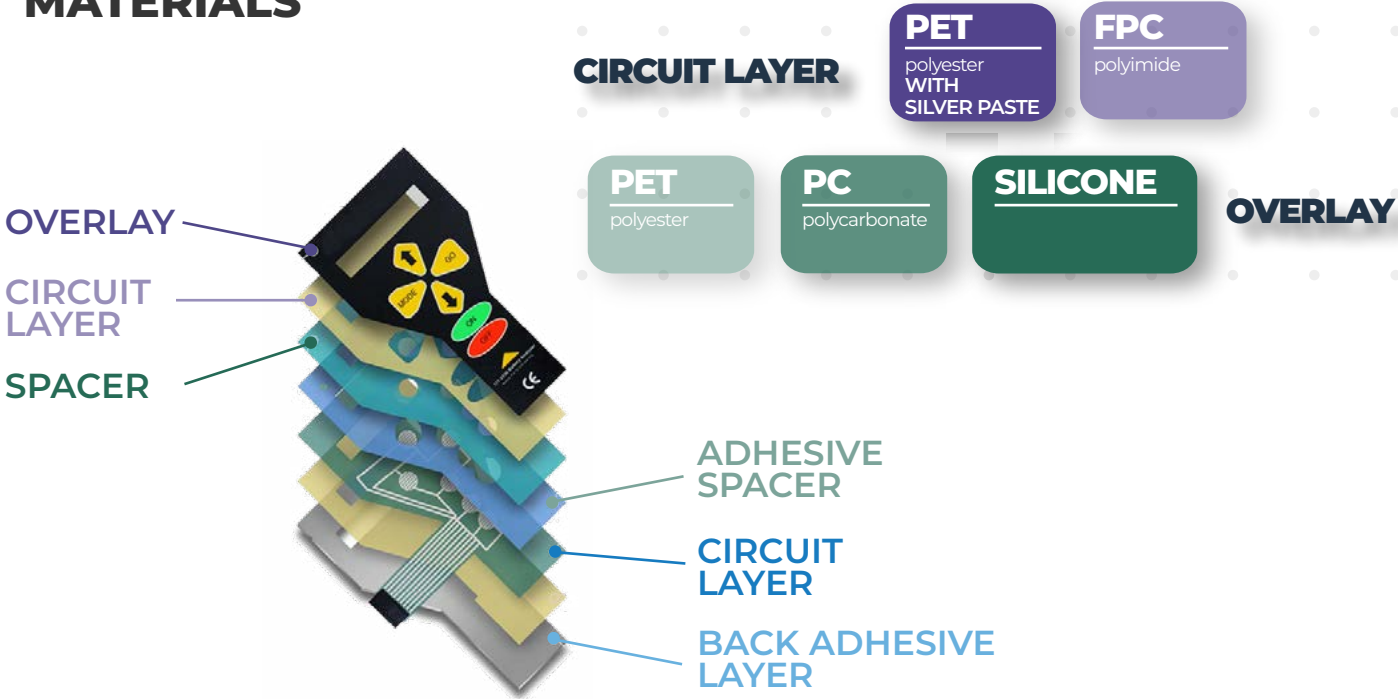
For more information, please refer to page 19



Capabilities

Our complete custom offer

MATERIALS



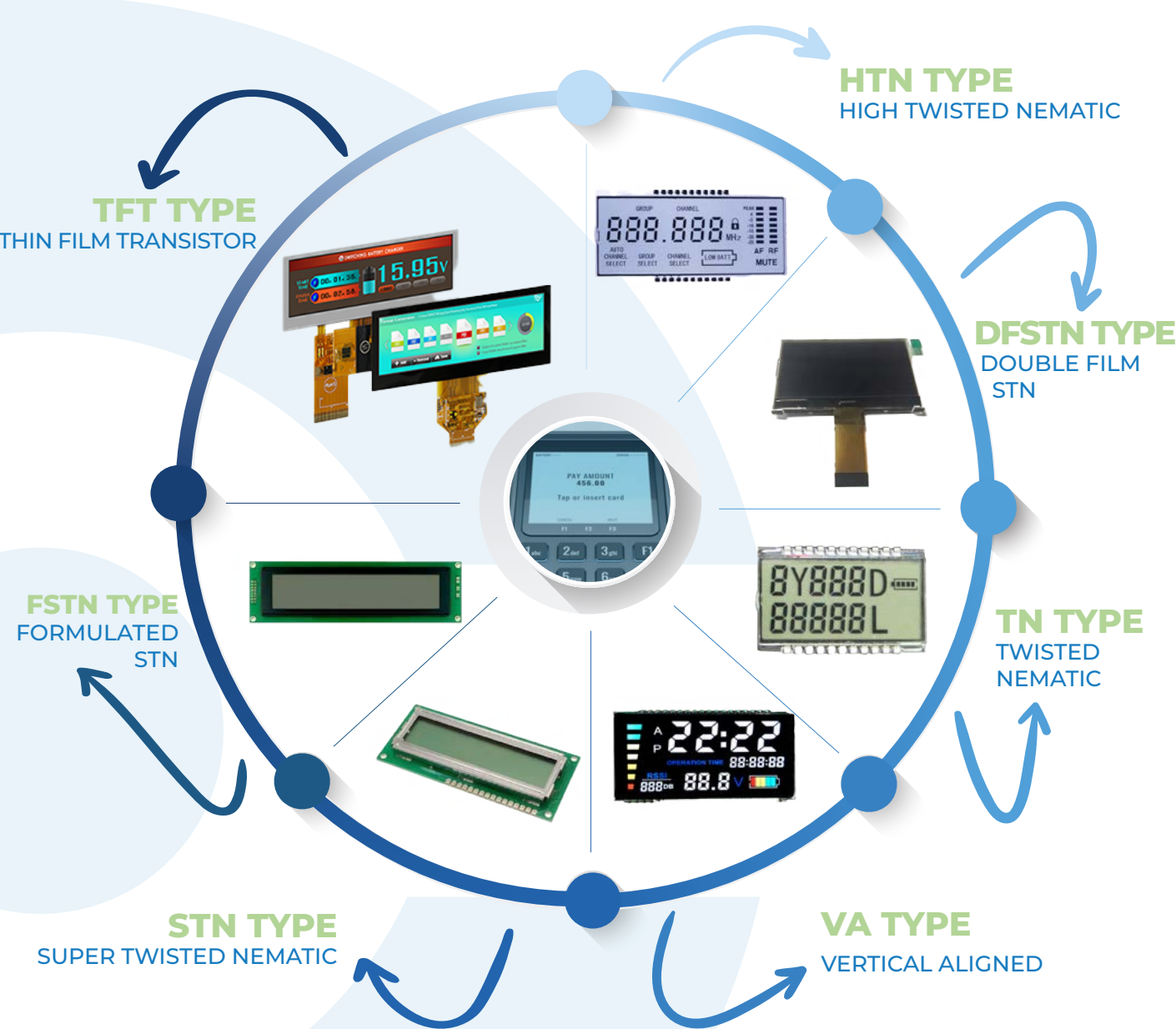
CUSTOM CAPABILITIES

The following table is a brief summary of **CIPEM** custom capabilities for membrane switch keypads:

DISPLAY TYPE	GRAPHIC TYPE	SIZE & LENGTH	RESISTANCE CAPABILITIES
Tactile or Nontactile Number of Switches Circuit Type	Flat Embossed	Number of Through holes Cut-outs From 20mm - 2000mm	UV resistant Waterproof
CONNECTOR TAIL	GRAPHIC COLORS	LEDs	PRODUCTION CAPABILITIES
Minimum clearance (from tail edges for the tracks) Male & Female connector	Number of Colors Background & Display windows	Colors & Types	7 000K pieces/month (average size of keypads)

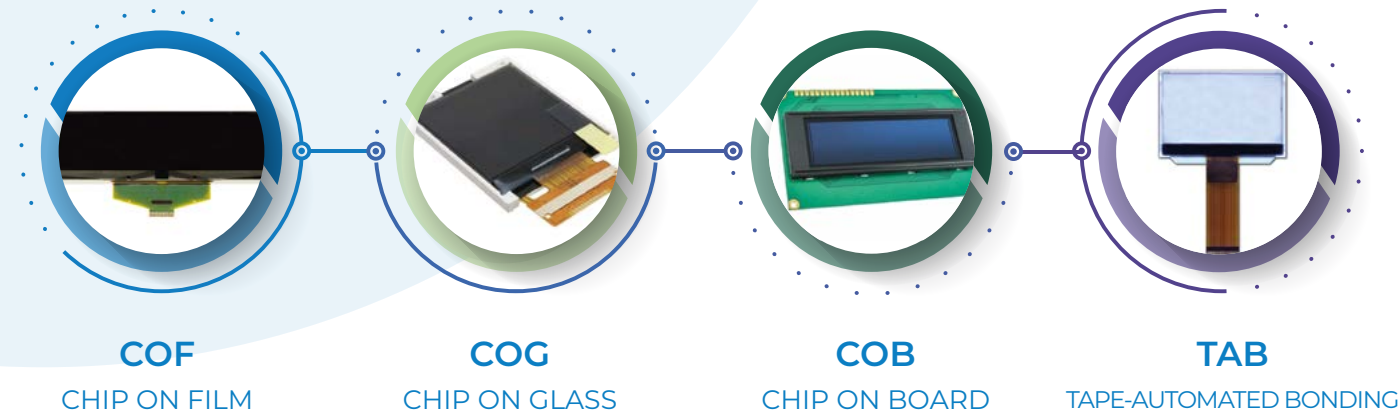
Displays

LCDs



LCD MODULES

Here is a short summary of our LCD module offer:



Batteries

Rechargeable



CERTIFICATIONS

CIPEM can safely deliver all types of batteries to your doorstep.
Do you have a question on freight? Our staff is IATA Certified for the transport of dangerous goods!

TRANSPORT			PRODUCT			
UN 38.3	IATA CERTIFIED	IEC 62133	CE	RoHS 3	UL 1642	UL 2054

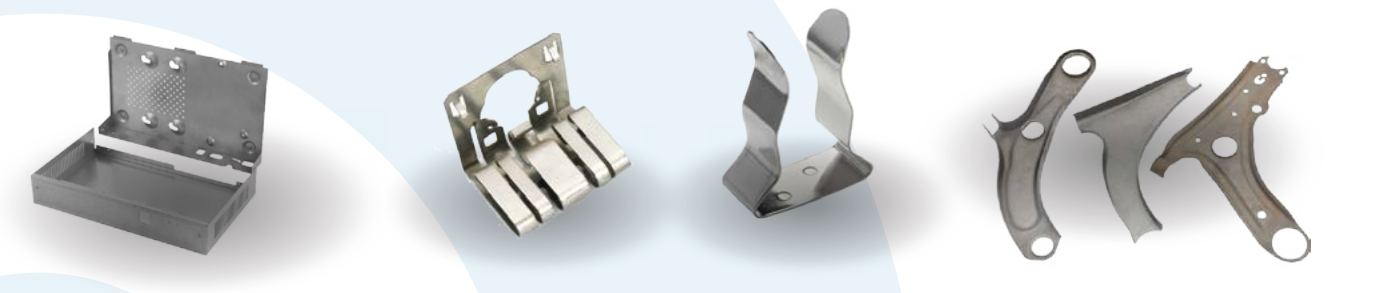
Metal parts

Stamping, shields, heatsinks

STAMPING PARTS

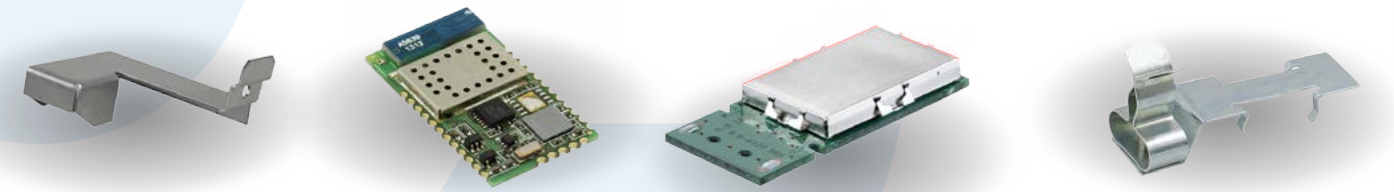
CIPEM provides a wide range of metal parts for different applications and sectors. Our metal partners are specialized in different technologies and mainly focus on Stamping parts, Heatsink and Extruded parts.

- CASING PARTS
- METAL CLIPS & TERMINALS
- SMALL & MEDIUM & LARGE PARTS



SHIELDS

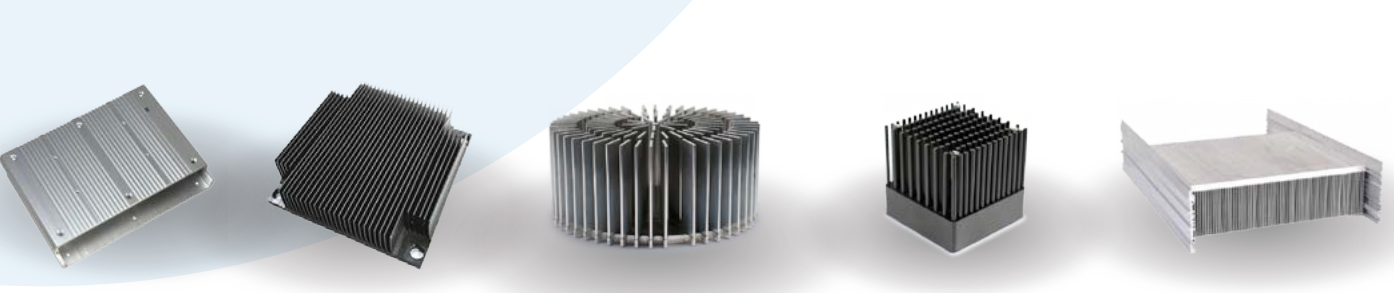
CIPEM provides a wide range of custom EMI & EMC shielding for demanding industries such as medical, automotive, and electronics. **CIPEM** is experienced in advising, developing, producing and testing the shielding solution. The parts can be produced with your company's logo. Shielding solutions can be made with a number of raw materials.



HEATSINKS

CIPEM provides a wide range of custom heatsinks. Here is a limited list of our offers. Contact your local sales representative for more information.

- EXTRUSION & CNC
- COLD FORGING
- STACKED FIN



Die casting parts

Our Customer offer



TECHNICAL CAPABILITIES

The added value of **Chromatin process** is that this surface treatment favors the **conductivity of the part** whereas the **Anodized layer** becomes **electrically non-conductive**.

SHAPE CAPABILITIES	PART SIZE WEIGHT	MATERIALS CAPABILITIES	SURFACE FINISHES - Ra	TOLERANCE CAPABILITIES	MAX WALL THICKNESS
Thin-walled & Solid COMPLEX CYLINDRICAL CUBIC	0.5 oz - 500 lb 14 g - 227 kg	Metals - Aluminum Lead - Magnesium Tin - Zinc -Copper	16-125 µin 0.41µm-3.175µm	± 0.0005 in ± 12.7 µm	0.015 - 1.5 in 0.4mm - 38mm

SURFACE TREATMENT CAPABILITIES

	ANODIZING CHROMATIN	ELECTRO PLATING NICKEL/TIN/ZINC	ELECTRO PHORESIS	PAINTING LIQUID POWDER	DECREASING	SHOT BLASTING	POLISHING BRUSHED SANDBLASTING	PRINTING SILKSCREEN LASER ENGRAVING
STAMPING	✓	✓	✓	✓	✓	—	✓	✓
HEATSINK	✓	—	✓	—	✓	—	✓	—
DIE CASTING	✓	✓	✓	✓	✓	✓	✓	✓
PROTECTIVE PROPERTIES								

Plastic Parts & mold



CIPEM is able to offer a wide range of Plastic parts which can be manufactured via all the standard manufacturing processes (**single & bi injection moldings**) as well as **Molds**.

The Plastic parts offered by **CIPEM** can be made out of different resin materials. The material is defined by the customer. **CIPEM** is also able to offer **Export Molds based on different standards (DME or HASCO)** according to customer's requirements.

PLASTIC INJECTION: RAW MATERIALS

ABS	PC	PPT	PBT	POM	PMA
ACRYLONITRILE BUTADIENE STYRENE	POLYCARBONATE	POLYPROPYLENE	POLYBUTYLENE TEREPHTHALATE	POLYOXYMETHYLENE OR ACETAL	POLYMETHYL METHACRYLATE OR ACRYLIC

Silicone & Rubber parts

Silicone and rubber can both be found in a wide variety of products, including automotive applications, electronics, medical devices or implants, and in-home repair and hardware with products such as silicone sealants.



SILICONE

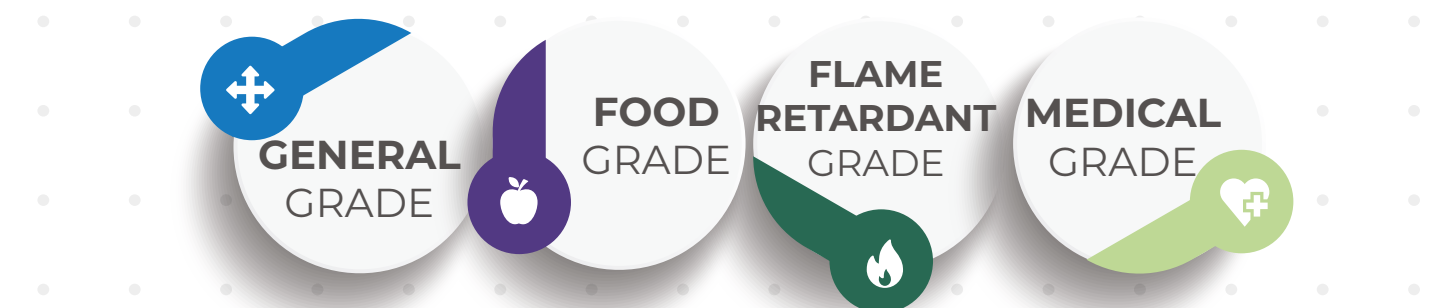
This material, unlike rubber, is not toxic and therefore can be used for home appliances, medical parts, and electronics products.

VS

RUBBER

This material is mainly used for automotive parts, heavy machinery, and industrial equipment thanks to its wear resistance, dielectricity, and anti-corrosion property.

MATERIAL GRADE



PRODUCT CAPACITY

**SILICONE
KEYPAD**
2.5 MILLION PIECES/MONTH

**SILICONE
MECHANICAL PARTS**
3 MILLION PIECES/MONTH

Sub Assemblies

PCBA/FPCBA & more

ELECTROMECHANICAL ASSEMBLY

CIPEM electromechanical assembly solutions simplify all your operations and reduce the total development cost. CIPEM sub assembly solutions help you focus on your core skills. We also produce Remote Control Unit IR, RF & BT with product options CKD, SKD & CBU.

ONE STOP SOLUTION

Ready to use! We optimize your supply chain through a combination of one stop solutions and tailored services.

DESIGN TO COMPLETION

We accompany you from design, through the first prototype and up to mass production, through testing and final packaging.

COST REDUCTION

Our network of suppliers allows our customers to obtain parts at competitive prices! Our expertise reduces the total cost of development!

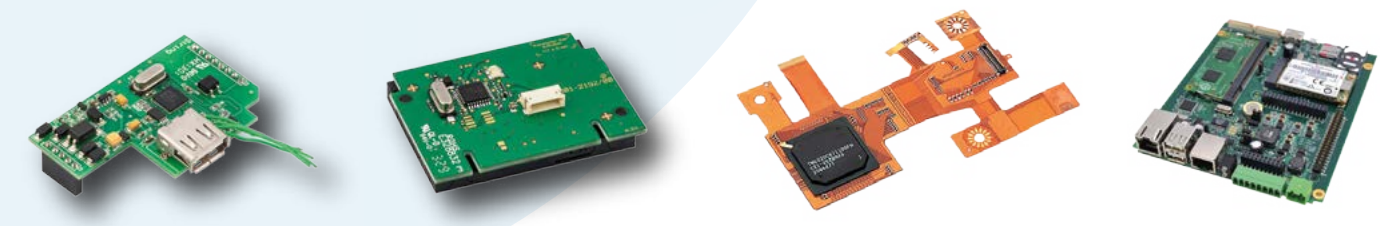
INTEGRATED TECHNOLOGIES

All our different products (cables, connectors, batteries, transformers, etc.) can be integrated into your sub-assembly project.



PCB ASSEMBLY

CIPEM provides customers with advanced PCB Assembly technology and a full range of services. From prototyping, high mix low volume to high volume global manufacturing, we provide Printed Circuit Board Assembly services in Europe, Asia and the Americas.



From design through completion, **CIPEM** has the **expertise to successfully manage your projects.**

Divsys France

From concept to Market



DIVSYS, a branch of **ICAPE Group**, acts as the link that **bridges the customer's ideas to a full-fledged design from prototype to series production.**

DIVSYS gathers experts from all the fields that a turnkey product requires!

All-in-one supply chain organization under one roof!

R&D

- Electronic Design
- Software Design
- Mechanical Design
- System Integration
- Proof Of Concept
- Prototype

INDUSTRIALIZATION

- DFM
- Purchases
- Tooling
- Samples
- Tests / Certifications

PRODUCTION

- Raw Material Purchasing
- Setting & Parameters
- 1st Parts Control (FAI)
- Ramp Up
- Production Series
- Quality Control
- Packing / Shipping

WHAT DOES DIVSYS DO?

RESEARCH & DEVELOPMENT

- Electronic design**
 - Analog & digital electronic design
 - Microprocessor and microcontroller
 - Telecommunications
 - Protocols
 - Autonomous Embedded System (IoT)
 - Optronics, Artificial intelligence
 - Power up to 5 KW
- Software development**
 - Real-time C/C++
 - Shell Unix/Linux scripting
 - HTML, PHP web
 - Signal processing (Radio, image, sound)
- Robotics**
 - Linear and non-linear controls
 - Servo Motors, stepper motors, actuators management
 - Inertial units design
 - Digital Signal Processing, GPS, GNSS
- Mechanical**
 - Mechanical design
 - Architecture and integration

CONSULTING/EXPERTISE

- Project Management**
 - Communication
 - Global ship shortage
 - One preferred contact
- Certification/Norm**
 - CEM, CE, UL, LVD, etc.
- Technical expertise**
 - Design, quality, robustness, industrialization, etc.
- Applied mathematics**
 - Matrix calculation
 - Digital sampling
 - Finite, infinite impulse response filter
 - Signal theory

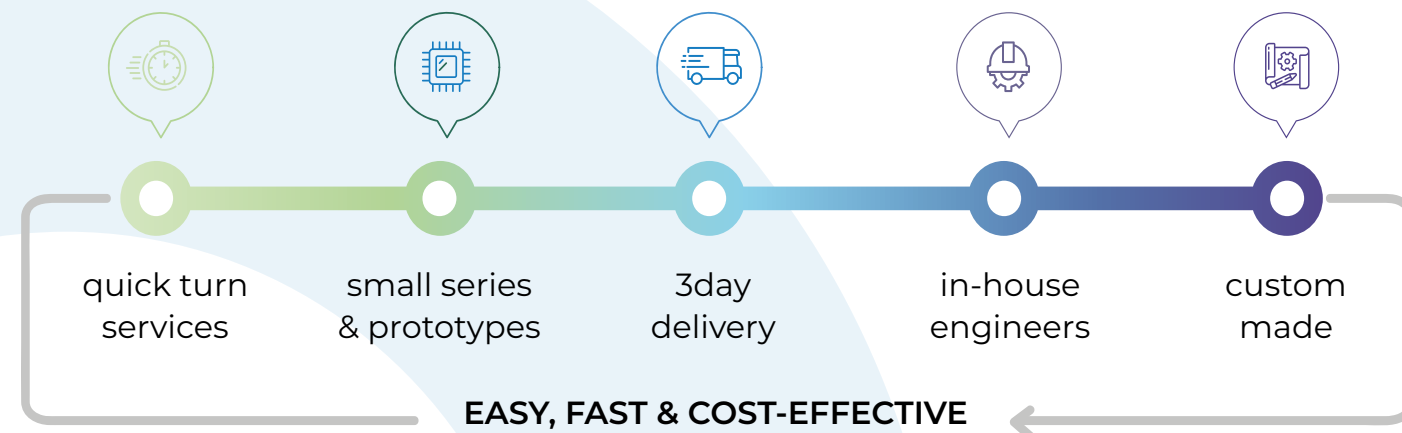
REVERSE ENGINEERING

- PCB/PCBA**
 - Analog, Digital, RF
- Manufacturing files**
 - Gerber
 - Schematics
 - BOM
 - Optimization
- Mechanical**
 - Silicone, keypads, Plastic, metal parts

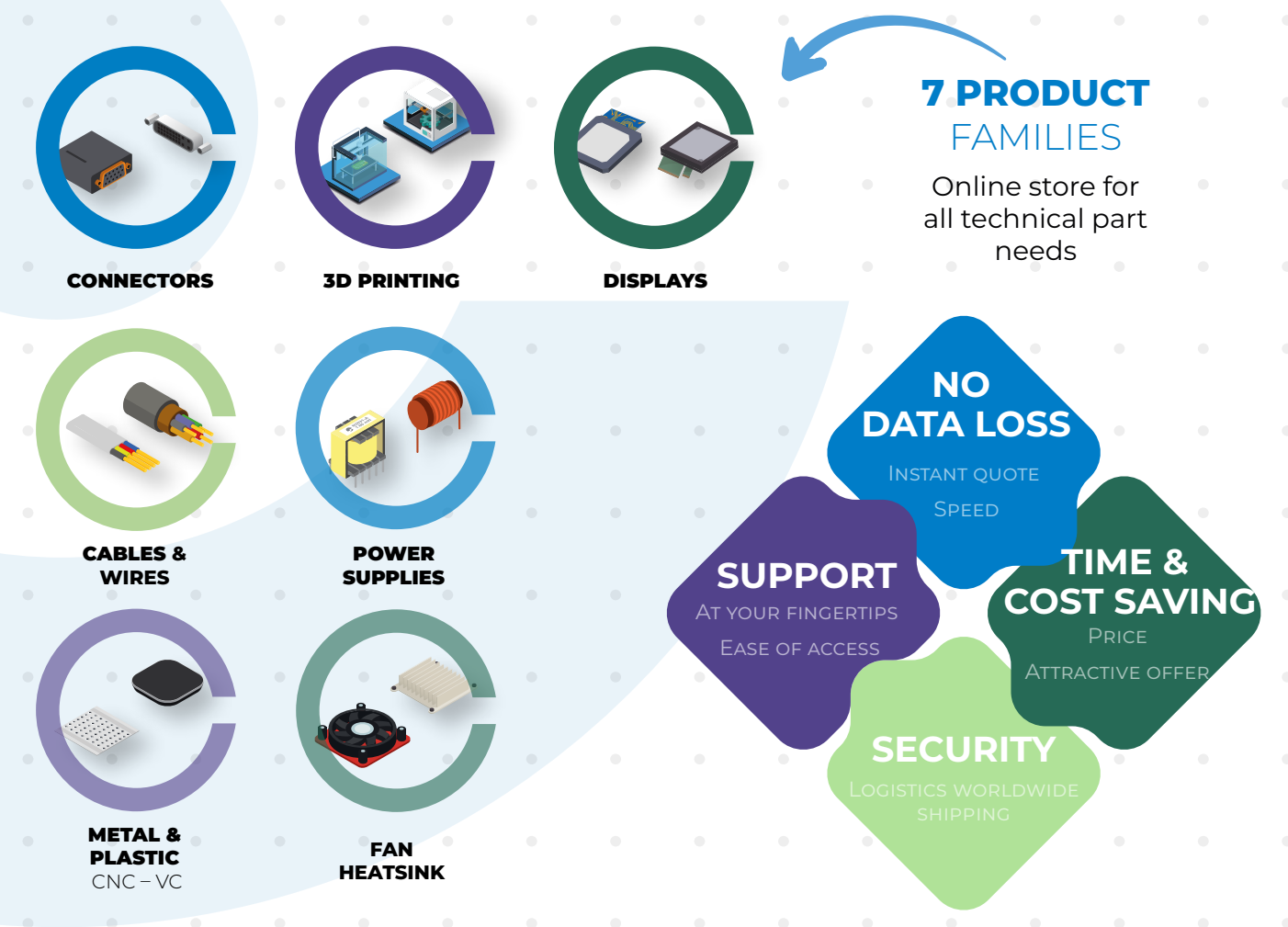
Cipem shop Online offer

cipem shop

www.cipemshop.com

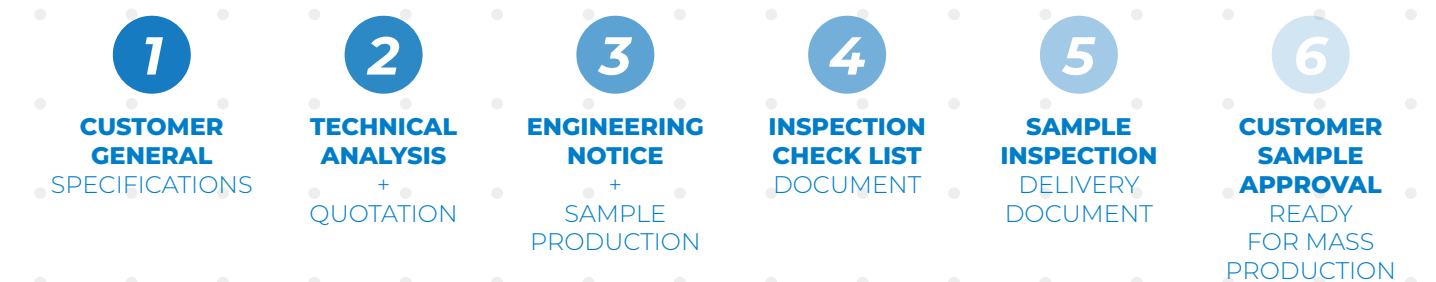


CAPABILITIES & ADVANTAGES



Advantages Working with CIPEM

COMPLETE & EFFECTIVE PROJECT MANAGEMENT



TECHNICAL EXPERTISE

We have a group of **fully trained engineers as well as a professional technical team**. They all provide customers with **technical support, advice, and more detailed analysis** when needed. In addition, we regularly organize workshops and seminars all around the world.

ENGINEERING ASSESSMENT NOTICE (EAN)

CIPEM acts upstream of each project; the aim is to provide all our customers with all the support and assistance necessary to deliver the final product in a timely and cost-effective manner.

As Custom Made experts, we know which material, process, or operation may require a specific intervention that will generate costs.

We can **go beyond the standard product manufacturing** process and assure you of the quality!

Through our long-lasting network of 50 partner suppliers, we have deployed the **EAN, (Engineering Assessment Notice)**, our customers' projects are examined from all angles, such as:

DETAILED ANALYSIS OF PRODUCT SPECIFICATIONS
ISO Spec

CARRY OUT RISK ANALYSIS
Type of materials, ease of sourcing, import conditions, on-time delivery, price control, maturity of the technology, etc.

PERFORM FEASIBILITY ANALYSIS
Analysis focused this time on the product and its technical characteristics, tolerances, curves, angles, and resistances are inspected to anticipate each need.

Contacts

28 BUSINESS UNITS LOCATED IN 17 COUNTRIES

ICAPE FRANCE, ICAPE DEUTSCHLAND, ICAPE ITALIA, ICAPE IBERICA, ICAPE NETHERLANDS, ICAPE POLSKA, ICAPE DENMARK, ICAPE SWEDEN, ICAPE MMAB, ICAPE IDELEC, ICAPE USA, ICAPE CALIFORNIA, ICAPE CANADA, ICAPE MEXICO, ICAPE BRAZIL, ICAPE HONG KONG, ICAPE DONGGUAN, ICAPE CHANGAN EXPRESS, ICAPE INDIA, ICAPE JAPAN, ICAPE SOUTH AFRICA, ICAPE TRAX

DIVSYS ICAPE, DIVSYS FRANCE

CIPEM FRANCE, CIPEM DEUTSCHLAND, CIPEM HONG KONG, CIPEM USA

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Stay in touch

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